Transformation Protocol 1

Preparation:

Aerobically grown M. magneticumAMB-1 was harvested and washed with 10 mM TES [N-tris(hydroxymethyl)methyl-2-aminoethanesulfonic acid] buffer containing 272 mM sucrose (pH 7.5) and resuspended in the same buffer at 10^9 cells/ml.

Electroporation:

A 50-µl cell suspension was aliquoted as electrocompetent cells. The cells were subjected to single-pulse electroporation and immediately transferred to 500 µl of Magnetic Spirillum growth medium (MSGM) supplemented with 20 mM Mg2+and incubated at 27°C overnight with shaking at 100 rpm.

Plating:

Cells were diluted in 5 ml of MSGM containing 0.7% agar and plated on 1% agar in MSGM containing 5 µg of ampicillin per ml or 2.5 µg of kanamycin per ml and incubated under anaerobic conditions.